International Journal of Health Sciences and Research
www.ijhsr.org ISSN: 2249-9571

Case Report

A Rare Case of Paediatric Spinal Intramedullary Abscess

Vinayak Raje[1], Vaishali Raje[2], Shruti Panicker[3], Mahesh Reddy[3], Madhavendra Kabra[3], Sangeeta Biradar[3]

[1]Associate Professor, Department of Neurosurgery,
[2]Associate Professor, Department of Community Medicine,
[3]Residents, Department of General Surgery,
Krishna Institute of Medical Sciences and Deemed University, Karad, Maharashtra, India.

Corresponding Author: Shruti Panicker

Received: 03/11/2014 *Revised: 04/12/2014* *Accepted: 10/12/2014*

ABSTRACT

Introduction: Intramedullary spinal cord abscesses are infrequently encountered in everyday neurosurgical practice.
Presentation of case: A 28 days old neonate was brought to us by his mother with the chief complaints of inability to move both lower limbs since last 15 days. Baby was delivered by L.S.C.S for obstructed labor at full term. The baby cried well immediately. Patient had fever for 2-3 days from eighth day after birth for which the mother consulted a local doctor, who prescribed some syrup. During this period the mother noticed sudden absence of the cycling movements of the lower limbs with bowel and bladder incontinence.
Discussion: Infective lesions of spine and underlying neurological structures namely, osteomyelitis, epidural abscess, subdural empyema, intramedullary localized and holocord abscess rare and very few cases are reported in the literature. We report an interesting and rare case of thoracic intramedullary abscess.
Conclusion: The aim of presenting this case report is its rarity.

Keywords: Intramedullary spinal abscess, pediatric.

INTRODUCTION

Patients with intramedullary spinal cord abscesses present with neurological findings related to the level of spinal cord involvement; MRI with gadolinium is still the procedure of choice for early diagnosis; and successful outcomes depend upon early diagnosis, aggressive surgical treatment, and appropriate antibiotic treatment following surgery. [1] Even when these guidelines are followed, 70% of patients are left with neurological sequelae. [2]

CASE REPORT

A 28 days old neonate was brought to us by his mother with the chief complaints of inability to move both lower limbs and bladder and bowel incontinence since last 15 days. Baby was delivered by L.S.C.S for obstructed labour at full term. The baby cried well immediately. Patient had fever for 2-3 days from eighth day after birth for which the mother consulted a local doctor, who prescribed some syrup. During this period the mother noticed sudden

absence of the cycling movements of the lower limbs.

Clinically the neonate was having paraplegia with bowel and bladder involvement. No abnormal spinal curvature or dermal sinus was noted on the back. His blood examination and X ray picture was normal. Spinal Magnetic Resonance Imaging (MRI) was showing an intramedullary space-occupying lesion at T6 to T8 level suggestive of dermoid or teratoma.

Patient underwent laminectomy from T5 to T8 level. On opening the dura a bulge was noticed at T6 and T7 level. Midline myelotomy performed to reach the lesion. About 4-5 cc thick, yellowish fluid was evacuated from the cavity and sent to microbiology department for culture. Thorough wash was given and wound was closed after dural repair. Patient was put on higher antibiotics. No growth was observed on culture after 48 hours. Patient did not show any neurological improvement during the stay in the hospital.

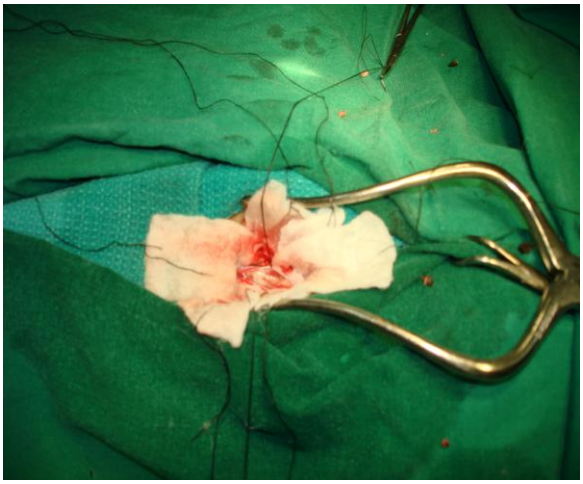

Fig .1(intra-op intra medullary spinal abscess)

DISCUSSION

Spinal Intramedullary abscess is a rare neurosurgical entity. They can hardly be distinguished from intramedullary neoplasms. Hart described first case of spinal intramedullary abscess in 1830, since then approximately 73 cases are reported in the literature. [3] 67% of the abscess presents in first four decades of life. Streptococci and staphylococci are the commonly isolated organisms. Primary source of the infection could be found only 45% of the cases. Most of the infections are metastatic spreads from lungs, endocarditis or gastrointestinal tracts. 10 cases reported have described an intramedullary abscess secondary to the dermal sinus. [4] In 44% cases of intramedullary abscesses there were pre-existing spinal or spinal cord abnormalities. [5] The signs and symptoms depend on the location of the abscess and the thoracic cord was commonly involved. Patients are divided into three clinical groups as per the presentation. [6]

Acute onset (symptoms <1 week)
Subacute onset (symptoms <6 weeks)
Chronic onset (symptoms >6 weeks)

Patients with acute form are likely to have fever and elevated leucocyte count and may show partial or complete transverse myelitis picture. Patients with chronic abscess are less likely to have fever and leucocytosis and symptoms mimic like an intramedullary space occupying lesion.CSF cultures are usually sterile. [7] MRI is the investigation of choice and usually demonstrates intramedullary lesions. A persistent neurological deficit even after surgical intervention, probably secondary to infective vasculitis, was found in 70% of cases. The intramedullary lesions were fatal in 8% cases.

In the management of spinal intramedullary abscess early diagnosis prompt surgical intervention and adjuvant antibiotics may improve in the clinical outcome.

CONCLUSION

The aim of presenting this case report is its rarity. Early surgical

management and appropriate antibiotic cover are key to the management of the patient.

ACKNOWLEDGEMENT

We are grateful to our Medical Director, for allowing us to present this case report.

Conflict of interest: None
Funding: None
Ethical approval: Written consent was obtained from the patient's relatives for the publication of this case report and accompanying images.

REFERENCES

1. Yuceer N. Senoglu, Arda MN. Intramedullary spinal cord abscess in a 4 year old child. *ActaNeurochir (Wein*). Nov 2004; 146(11): 1273-4.
2. R S Maurice Williams, D Pamphilon, H B Coakham: Itramedullary abscess- a rare case complication of spinal dyraphism: Jr. Of Neurology, Neurosurgery and Psychiatry: 1980:43: 1045-1048.
3. Benzil Deborah, Epstein Mel H, et al: Intramedullary Epidermoid associated with an intramedullary spinal abscess secondary to dermal sinus: Neurosurgery: Jan 1992:30 (1) 118-120.
4. B Ramesh, Jafar J. H. Paul et al: Intramedullary abscess associated with spinal cord. Ependymoma: A case report : Neurosurgery Jan 1992:30(118-120.
5. Roh JE, Lee SY, Cha SH, Cho BS, Jeon MH, Kang MH. Sequential magnetic resonance imaging finding of intramedullary spinal cord abscess including diffusion weighted image: a case report. Korean J Radiol. Mar-Apr 2011;12(2):241-6.
6. Ebner FH, Roser F, Acioly MA, Schoeber W, Tatagiba M. Intramedullary lesions of the conusmedullaris: differential diagnosis and surgical management. Neurosurg Rev. Sep 27 2008.
7. Hood B, Wolfe SQ, Trivedi RA, Rajadhyaksha C, Green B. Intramedullary abscess of the cervical spinal cord in an otherwise healthy man. World Neurosurg. Sep-Oct 2011;76(3-4):361.e15-9.

How to cite this article: Raje V, Raje V, Panicker S et. al. A rare case of paediatric spinal intramedullary abscess. Int J Health Sci Res. 2015; 5(1):351-353.

****